

ABSTRACT OF THE DISCLOSURE

A printing apparatus (10) exposes an image onto a photosensitive medium (14), having a printhead (20) with a linear array of exposure sources (40), each exposure source (12) operable at a variable intensity. A shuttle mechanism 5 (16) moves the printhead (20) over the photosensitive medium (14) in a reciprocating motion between one end of a carriage assembly (72) and the other. An encoder (38) is coupled to the shuttle mechanism (16) for providing an index encoder pulse (60) at each of a plurality of increments of position of the shuttle mechanism (16) along the carriage assembly (72). Exposure control logic 10 calculates a shuttle velocity according to index signal timing and adjusts the variable intensity of each exposure source (12) according to the shuttle velocity.